

CLAIMS

1. A grinding mill, comprising:

a grinding ring;

5 a excentric disc, defining a horizontal plane, placed inside said grinding ring and having a periphery with a plurality of seats, each seat having two radially oriented lateral walls into which horizontally oriented elongated holes are cut and an extension piece that extends in a downward direction;

10 a grinding wheel, having a lower side with a base set into said seat and being placed next to said grinding ring; and

a regulating device, further comprising

at least one elastic plate assembly, having an upper end fastened to said base of said grinding wheel and a lower end that extends downward,

15 a first adjusting device, holding said base in said seat at a preset horizontal position,

a covering plate, covering an outer side of said seat and having a hole,

20 a second adjusting device, mounted on said hole of said covering plate, allowing to adjust a distance between said grinding wheel and said grinding ring and to adjust mutual orientations thereof to be parallel, and

25 a third adjusting device, mounted at said lower end of said elastic plate assembly, fixing said elastic plate assembly to said extension piece of said seat at a lower end thereof, determining an elastic force of said elastic plate assembly,

wherein said first, second and third adjusting elements allow to adjust said distance and mutual orientation between said grinding wheel and said grinding ring as well as a grinding force.

30 2. The grinding mill according to claim 1, wherein said elastic plate assembly has an arc-like shape.

3. The grinding mill according to claim 1, wherein said elastic plate assembly on said lower end thereof has an elongated incision.

4. The grinding mill according to claim 1, wherein said first, second and third adjusting elements each comprise a threaded rod and/or nuts.

5. A separator, used in conjunction with a grinding mill and mounted in a main body thereof on a rotating vertical separator shaft, comprising:

two support rings of equal sizes and shapes, mounted on top of each other, having openings surrounded by a plurality of fixing holes; and

a plurality of blades, having vertical rods that are put through said fixing holes of said two support rings.

6. The separator according to claim 5, wherein said blades are surrounded by a guiding device.

7. The separator according to claim 6, wherein said guiding device comprises a drum body, having a peripheral surface with a plurality of openings which are covered by inclined lids fixed to one edge, and a pan, mounted below said drum body at a vertically adjustable distance.

8. The separator according to claim 7, wherein said inclined lids point outwards.

9. The separator according to claim 7, wherein said inclined lids point inwards.

10. The separator according to claim 7, wherein said inclined lids alternately point inwards and outwards.

11. The separator according to claim 7, wherein an extension ring is attached to an upper side of said drum body.